



FT	Protein	29.	.666	/note= "mature protein"
PN	W09827805-A1.			
PD	02-JUL-1998.			
PF	22-DEC-1997; AU0874.			
PR	20-DEC-1996; AU-004275.			
PT	(RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.			
PI	Bower NI, Goultier KC, Green JL, Manners JM, Marcus JP.			
DR	WPI: 98-377279/32.			
DR	N-PSDB; V42310.			
PT	Novel anti-microbial protein from e.g. Macadamia integrifolia - useful for controlling microbial infestations of plants or mammals			
PS	Claim 1; Page 34-36; 96pp; English.			
CC	The sequence is that of an antimicrobial protein which can be used to control microbial infestations in plants or mammals			
CC	Sequence 666 AA;			
Query Match	99.4%; Score 342; DB 1; Length 666;			
Best local similarity 95.3%; Pred. No. 8.81e-24;				
Matches 41; Conservative 2; Mismatches 0; Indels 0; Gaps 0;				
Db	4 NQEDPQTECQCCORCRQESGPRQQYCORRCKEICEEEEEEY 116			
ID	W62830;			
AC	W62830;			
DT	27-OCT-1998 (first entry)			
DE	Macadamia integrifolia antimicrobial protein.			
KW	antimicrobial protein; infestation; control.			
OS	Macadamia integrifolia.			
FR	Key			
FT	Peptide			
FT	1..28			
FT	/note= "signal peptide"			
FT	29..666			
FT	Protein			
FT	/note= "mature protein"			
PN	W09827805-A1.			
PD	02-JUL-1998.			
PF	22-DEC-1997; AU0874.			
PR	20-DEC-1996; AU-004275.			
PT	(RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.			
PI	Bower NI, Goultier KC, Green JL, Manners JM, Marcus JP;			
DR	WPI: 98-377279/32.			
DR	N-PSDB; V42316.			
PT	Novel anti-microbial protein from e.g. Macadamia integrifolia - useful for controlling microbial infestations of plants or mammals			
PS	Claim 1; Page 43-45; 96pp; English.			
CC	The sequence is that of an antimicrobial protein which can be used to control microbial infestations in plants or mammalian animals.			
SQ	Sequence 625 AA;			
Query Match	97.4%; Score 335; DB 1; Length 625;			
Best Local Similarity 93.0%; Pred. No. 4.18e-23;				
Matches 40; Conservative 2; Mismatches 1; Indels 0; Gaps 0;				
Db	33 NQEDPQTECQCCORCRQESGPRQQYCORRCKEICEEEEEEY 75			
QY	74 NQDPDQTCQCCORCRQESGPRQQYCORRCKEICEEEEEEY 116			
RESULT	4			
ID	W62831			
AC	W62831;			
DT	27-OCT-1998 (first entry)			
DE	Theobroma cacao antimicrobial protein.			
KW	antimicrobial protein; infestation; control.			
OS	Theobroma cacao.			
PN	W09827805-A1.			
PD	02-JUL-1998.			
PF	22-DEC-1997; AU0874.			
PR	20-DEC-1996; AU-004275.			
PT	(RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.			
PI	Bower NI, Goultier KC, Green JL, Manners JM, Marcus JP;			
DR	WPI: 98-377279/32.			
DR	N-PSDB; V42310.			
PT	Novel anti-microbial protein from e.g. Macadamia integrifolia - useful for controlling microbial infestations of plants or mammals			
PS	Claim 1; Page 34-36; 96pp; English.			
CC	The sequence is that of an antimicrobial protein which can be used to control microbial infestations in plants and mammalian animals.			
SQ	Sequence 525 AA;			
Query Match	46.2%; Score 159; DB 1; Length 525;			
Best Local Similarity 47.5%; Pred. No. 1.70e-06;				
Matches 19; Conservative 10; Mismatches 11; Indels 0; Gaps 0;				
Db	78 EEEIQLRQYQOCQCRQESGPRQQYCORRCKEICEEEEEEY 117			
QY	75 QDPDQTCQCCORCRQESGPRQQYCORRCKEICEEEEEEY 114			
RESULT	5			
ID	R20181			
AC	R20181;			
DT	16-APR-1992 (first entry)			
DE	Sequence encoded by 67 kD T. cacao protein cDNA.			
KW	Cocca; flavour; vicilin; seed storage protein.			
OS	Theobroma cacao.			
PN	W0919801-A.			
PD	26-DEC-1991.			
PF	07-JUN-1991; GB0914.			
PR	11-JUN-1990; GB-013016.			
PI	(MRSC ) MARS UK LTD.			
PI	Spencer ME, Hodge R, Deakin EA, Ashton S;			
DR	WPI: 92-024418/03.			
DR	WPI: 92-024418/03.			
PT	Recombinant cocoa proteins - are responsible for flavour in cocoa beans and produced in large quantities using yeast and bacterial expression vectors			
PS	Claim 4; Fig 2; 59pp; English.			
CC	The inventors claim a 67 kD and 31 kD T. cacao protein, and fragments, and encoding DNAs. The 47 kD and 31 kD proteins are derived from the 67 kD precursor. T. cacao protein cDNA was detected in a cDNA library prepared from immature cocoa beans RNA using a probe based on the AA sequence of a CNBr peptide common to the 47 kD and 31 kD polypeptides. Homology searches revealed close homologies between the 67 kD polypeptide and the vicilins, which are seed storage proteins.			
CC	Sequence 566 AA;			
Query Match	46.2%; Score 159; DB 1; Length 566;			
Best Local Similarity 47.5%; Pred. No. 1.70e-06;				
Matches 19; Conservative 10; Mismatches 11; Indels 0; Gaps 0;				
Db	78 EEEIQLRQYQOCQCRQESGPRQQYCORRCKEICEEEEEEY 117			
QY	75 QDPDQTCQCCORCRQESGPRQQYCORRCKEICEEEEEEY 114			
RESULT	6			
ID	W62832			
AC	W62832;			
DT	27-OCT-1998 (first entry)			
DE	Gossypium hirsutum antimicrobial protein.			
KW	antimicrobial protein; infestation; control.			
OS	Gossypium hirsutum.			
PN	W09827805-A1.			
PD	02-JUL-1998.			
PF	22-DEC-1997; AU0874.			
PR	20-DEC-1996; AU-004275.			
PT	(RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.			
PI	Bower NI, Goultier KC, Green JL, Manners JM, Marcus JP;			

DR	WPI: 98-37279/32.	Matches 11; conservative 14; Mismatches 8; Indels 1; Gaps 1;
PT	Novel anti-microbial protein from e.g. <i>Macadamia integrifolia</i> - useful for controlling microbial infestations of plants or mammals	DB 557 EEEERSGRGECRQCLRHGEGPWTBMRCCR 590
PS	Claim 1: Page 49-51; 96pp; English.	AC W62835; DE 27-OCT-1998 (first entry)
CC	The sequence is that of an antimicrobial protein which can be used to control microbial infestations in plants and mammalian animals.	DE Zea mays antimicrobial protein; infestation; control.
CC		DE Zea mays.
SQ	Sequence 590 AA;	OS W0827805-A1.
RESULT 7	Query Match 36.9%; Score 127; DB 1; Length 590; Best Local Similarity 47.5%; Pred. No. 1.24e-03; Matches 19; Conservative 8; Mismatches 11; Indels 2; Gaps 1;	PD 02-JUL-1998.
ID	W62841 standard; Protein: 28 AA.	PF 22-DEC-1997; AU0874.
AC	W62841; 27-OCT-1998 (first entry)	PR 20-DEC-1996; AU-004275.
DT	27-OCT-1998 (first entry)	PA (RTR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.
DE	<i>Stereoctarpus sinuatus</i> antimicrobial protein.	PI Bower NI, Goultter KC, Green JL, Manners JM, Marcus JP;
KW	antimicrobial protein; infestation; control.	DR WPI: 98-37279/32.
OS	<i>Stereoctarpus sinuatus</i> .	PT Novel anti-microbial protein from e.g. <i>Macadamia integrifolia</i> - useful for controlling microbial infestations of plants or mammals disclosure; Page 60; 96pp; English.
PN	W0827805-A1.	PS The sequence is that of an antimicrobial protein which can be used to control microbial infestations in plants and mammalian animals.
PD	02-JUL-1998.	CC
PR	20-DEC-1996; AU-004275.	CC
PA	(RTR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.	CC
PI	Bower NI, Goultter KC, Green JL, Manners JM, Marcus JP;	CC
DR	WPI: 98-37279/32.	CC
PT	Novel anti-microbial protein from e.g. <i>Macadamia integrifolia</i> - useful for controlling microbial infestations of plants or mammals disclosure; Page 60; 96pp; English.	CC
PS	Claim 1: Page 66; 96pp; English.	CC
CC	The sequence is that of an antimicrobial protein which can be used to control microbial infestations in plants and mammalian animals.	CC
SQ	Sequence 28 AA;	CC
RESULT 8	Query Match 32.3%; Score 111; DB 1; Length 28; Best Local Similarity 61.5%; Pred. No. 3.08e-02; Matches 16; Conservative 2; Mismatches 8; Indels 0; Gaps 0;	SQ Sequence 33 AA;
ID	W62835; Standard; Protein: 593 AA.	RESULT 10
AC	W62835; 09-APR-1992 (first entry)	Query Match 30.5%; Score 105; DB 1; Length 33;
DT	27-OCT-1998 (first entry)	Best Local Similarity 44.0%; Pred. No. 1.01e-01; Matches 11; Conservative 9; Mismatches 4; Indels 1; Gaps 1;
DE	zea mays antimicrobial protein.	DB 6 ECRQCLRRHESQYENQECMRCCR 30
OS	zea mays.	AC R21079; DE Antimicrobial maize peptide, CMIII.
PN	W0927805-A1.	DE Maize, CMIII; corn; pathogen.
PD	02-JUL-1998.	OS Zea mays.
PF	22-DEC-1997; AU0874.	PN EP-465009-A.
PR	20-DEC-1996; AU-004275.	PD 08-JAN-1992.
PA	(PION-) PIONEER HI-BRED INT.	PR 05-JUN-1991; 305064.
PI	Duvick JP, Rood TA, Rao AG;	PR 05-JUN-1990; US-536127.
DR	WPI; 92-010214/02.	PI WPI: 92-010214/02.
PT	Use of maize seed peptide CMIII and DNA encoding it - for killing or inhibiting plant pathogenic microorganisms.	DR
PT	PT Example 2; Page 5; 21pp; English.	PT
PS	The peptide (SEQ ID NO:1) was purified from public corn variety B73 and proprietary corn variety MHI8. It is basic and has a total mol. wt. of 3900 daltons. The peptide sequence was used to design probes which were used to screen a maize genomic or cDNA library.	PS
CC	The isolated CMIII gene can be used to prepare an expression vector for prodn. of recombinant CMIII for use in controlling plant pathogenic organisms.	CC
CC	See also Q20272 and 3.	CC
SQ	Sequence 35 AA;	CC
RESULT 9	Query Match 27.9%; Score 96; DB 1; Length 35; Best Local Similarity 44.0%; Pred. No. 5.81e-01; Matches 11; Conservative 8; Mismatches 5; Indels 1; Gaps 1;	DB 6 ECRQCLRRHESQYENQECMRCCR 30
ID	W62836 standard; Protein: 33 AA.	OY 84 QCORRCRQESGPRQQYCQRCK 107
AC	W62835; DE Zea mays antimicrobial protein.	
DT	27-OCT-1998 (first entry)	
DE	antimicrobial protein; infestation; control.	
OS	zea mays.	
PN	W0827805-A1.	
PD	02-JUL-1998.	
PR	20-DEC-1996; AU-004275.	
PA	(RTR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.	
PI	Bower NI, Goultter KC, Green JL, Manners JM, Marcus JP;	
DR	WPI: 98-37279/32.	
PT	Novel anti-microbial protein from e.g. <i>Macadamia integrifolia</i> - useful for controlling microbial infestations of plants or mammals	
PS	Claim 1; Page 58-60; 96pp; English.	
CC	The sequence is that of an antimicrobial protein which can be used to control microbial infestations in plants and mammalian animals.	
CC		
SQ	Sequence 593 AA;	
RESULT 11	Query Match 32.3%; Score 111; DB 1; Length 593; Best Local Similarity 32.4%; Pred. No. 3.08e-02;	

RESULT 11  
 ID W62837 standard; Protein: 637 AA.  
 AC W62837;  
 DT 27-OCT-1998 (first entry)  
 DE Hordeum vulgare antimicrobial protein.  
 KW antimicrobial protein; infestation; control.  
 OS Hordeum vulgare.  
 PN WO9827805-A1.  
 PD 02-JUL-1998.  
 PR 22-DEC-1997; AU0874.  
 PR 20-DEC-1995; AU-004275.  
 PA (RETR.) COOP RES CENT TROPICAL PLANT PATHOLOGY.  
 PI Bower NI, Goulter KC, Green JL, Manners JM, Marcus JP;  
 DR WPI: 98-37279/32.  
 PT Novel anti-microbial protein from e.g. Macadamia integrifolia -  
 useful for controlling microbial infestations of plants or mammals  
 PS Claim 1; Page 60-62; 96pp; English.  
 CC The sequence is that of an antimicrobial protein which can  
 be used to control microbial infestations in plants and mammalian  
 CC animals.  
 SQ Sequence 637 AA;

Query Match 24.7%; Score 85; DB 1; Length 637;  
 Best Local Similarity 42.4%; Pred. No. 4.72e+00;  
 Matches 14; Conservatve 7; Mismatches 7; Indels 5; Gaps 3;

Db 42 QQCVRQRQ-ER-PR--YSHARCVQECRDDQQ 69  
 QY 83 QQCQRKRCRQQESGPRQQYCORRCKEICEEEEEE 115

RESULT 12  
 ID R91706 standard; Protein: 106 AA.  
 AC R91706;  
 DT 17-NOV-1996 (first entry)  
 DE AcanNAP24.  
 KW AcanNAP; NamNAP; AceNAP; AduNAP; anticoagulant;  
 KW nematode-extracted anticoagulant protein; serine protease;  
 KW nematode; thrombosis; parasitic worm.  
 OS Ancylostoma caninum.  
 PN WO9612021-A2.  
 PD 25-APR-1995.  
 PR 17-OCT-1995; U13231.  
 PR 18-OCT-1994; US-326110.  
 PR 21-JUN-1995; US-486390.  
 PR 05-JUN-1995; US-461665.  
 PR 05-JUN-1995; US-486397.  
 PR 05-JUN-1995; US-486398.  
 PR (CORY-) CORVAS INT INC.  
 PT Bergum PW, Ganssmans YGJ, Jaspers LS, Laroche YR;  
 PT Lauwersys MJ, Messensjhl, Moyle M, Stanssens PEH;  
 PT Vlasuk GP;  
 DR WPI: 96-222007/22.  
 DR N-PSDB; TI2951.  
 PT Proteins with anticoagulant and/or serine protease inhibitory  
 PT activity - isolated from nematodes and useful to inhibit blood  
 PT coagulation.  
 PS Claim 221; Fig 13A; 243pp; English.  
 CC Proteins with anticoagulant and/or serine protease inhibitory  
 CC activity, isolated from nematodes, are useful to inhibit blood  
 CC coagulation. The proteins can be added to blood collection tubes  
 CC defining the collection of mammalian plasma. They are also useful  
 CC to prevent or inhibit thrombosis, and may be given alone or in  
 CC combination with other therapeutic or in vivo diagnostic agents.  
 CC The proteins can serve as immunogens to raise antibodies for use in  
 CC the diagnosis and identification of NAP concn. Levels in biological  
 CC fluids, e.g. to detect mammalian infection with a parasitic worm.  
 CC They can also be used as immunogens in prophylactic and therapeutic  
 CC vaccines against parasitic worm infection. The proteins may  
 CC double the clotting time of human plasma in prothrombin time assays  
 CC when present at 10-50 nMol, and double the clotting time of human  
 CC plasma in activated partial thrombin time assays when present  
 CC at 10-100 nMol.  
 CC The anticoagulant proteins are pref. derived from  
 CC Ancylostoma caninum, A. ceylanicum, A. duodenale, Necator  
 CC americanus or Heligmosomoides polygyrus.  
 CC The proteins pref. have 2 NAP domains and specifically inhibit  
 CC the catalytic activity of the factor VIIa/TF complex in the  
 CC presence of factor Xa or a catalytically inactive factor Xa deriv.,  
 CC do not specifically inhibit the activation of factor VIIa in the  
 CC absence of TF and do not specifically inhibit prothrombinase.  
 SQ Sequence 106 AA;

Query Match 24.1%; Score 83; DB 1; Length 107;

CC The anticoagulant proteins are pref. derived from  
 CC Ancylostoma caninum, A. ceylanicum, A. duodenale, Necator  
 CC americanus or Heligmosomoides polygyrus.  
 CC The proteins pref. have 2 NAP domains and specifically inhibit  
 CC the catalytic activity of the factor VIIa/TF complex in the  
 CC presence of factor Xa or a catalytically inactive factor Xa deriv.,  
 CC do not specifically inhibit the activation of factor VIIa in the  
 CC absence of TF and do not specifically inhibit prothrombinase.

Best Local Similarity 56.3%; Pred. No. 6.86e+00; Mismatches 2; Indels 1; Gaps 1; Matches 9; Conservative 4;

Db 40 CERKCKITSEEDDY 55  
| : : | | | : |  
Qy 102 CORRCK-EICEEEEEEY 116

RESULT 14  
DE W22150 standard; Protein; 626 AA.  
ID W22150; Page 29-31; 45pp; English.  
AC W22150; 29-DEC-1997 (first entry)  
DE Peanut allergen Ara h1.  
KW seed storage protein; allergen; allergy; hypersensitivity;  
KW vaccine; anaphylactic shock; immunotherapy; therapy;  
KW monoclonal antibody; ELISA; analysis; Ara h1.  
OS Arachis hypogaea strain Florunner.

Key Location/Qualifiers  
Peptide 1..22  
FT /label= Sig\_Peptide  
FT 23..626  
FT /label= Mat\_protein  
FT Modified\_site 521..523  
FT /note= "N-glycosylation site"  
PN W09724139-A1.  
PD 10-JUL-1997.  
PF 23-SEP-1996; U15222.  
PR 04-MAR-1995; US-610424.  
PR 29-DEC-1995; US-009455.  
PA (UWAR-) UNIV ARKANSAS.  
PI Bannon GA, Burks AW, Cockrell G, Helm RM, Stanley JS;  
DR WPI; 97-36345/33.  
PT Peanut allergens Ara h1 and Ara h1 - used for vaccination and in  
PT two-site monoclonal antibody based ELISA  
PS Claim 31; Page 172; 334pp; English.  
CC This polypeptide comprises major peanut allergen Ara h1 (W22149).  
CC Its sequence was deduced from cDNA clone P41b (T76613), isolated  
CC from peanut seed cDNA using a primer (see T76616) based on an  
isolated Ara h1 peptide (see W24206). The sequence shows  
CC significant homology with the vicilin family of seed storage  
proteins of other legumes. The allergen is recognised by serum  
CC IgE from a large proportion of individuals with peanut  
hypersensitivity. Ara h1 and Ara h1 (see W24164) can be used to  
raise monoclonal antibodies which are used in a specific two-site  
CC MAB ELISA for the detection of Ara h1 or Ara h1 (claimed). IgE-  
binding Ara h1 antigen epitopes (see W24165-87) may be used in  
CC vaccines to protect against allergic reactions to peanut allergens,  
CC e.g. anaphylactic shock.  
SQ Sequence 626 AA:

Query Match 23.0%; Score 79; DB 1; Length 441;  
Best Local Similarity 29.6%; Pred. No. 1.44e+01; Mismatches 11; Indels 1; Gaps 1; Matches 8; Conservative 7;

Db 107 EERKCEESCKLQKKNRKKCQCRFOKC 133  
| : : | : | : | : | : |  
Qy 81 DCQOCORRCRQOBESGPROQQYCQ-RRC 106

Search completed: Sat May 13 10:05:02 2000  
Job time : 8 secs.

PI Mukherjee R;  
DR WPI; 96-087756/09.  
N-PSDB; T10583.  
PT Screening methods for identifying NUC protein inhibitors - for use as potential agents for the treatment of hyperlipidemia,  
PT hypercholesterolemia and hyperlipoproteinemia.  
PS Claim 44; Page 29-31; 45pp; English.  
CC A novel human peroxisome proliferator activated receptor (PPAR),  
designated hNUC1B (R89214), is expressed from a cDNA clone (T10583)  
isolated from a human kidney cDNA library. hNUC1B is a member of  
CC the PPAR family and can be used to screen NUC protein inhibitors.  
Sequence 441 AA;

Query Match

23.0%

Score

79

DB

1

Length

441

Matches

8

Conservative

7

Mismatches

11

Indels

1

Gaps

1

RESULT 15  
ID R89214 standard; Protein; 441 AA.  
AC R89214;  
DT 03-APR-1996 (first entry)  
DE Peroxisome proliferator activated receptor hNUC1B.  
KW hNUC1B; Peroxisome proliferator activated receptor; hyperlipidemia;  
KW hypercholesterolemia; hyperlipoproteinemia;  
OS Homo sapiens.  
PN W09601130-A2.  
PD 18-JAN-1996.  
PF 20-JUN-1995; US08328.  
PR 01-JUL-1994; US-270635.  
PA (LIGA-) LIGAND PHARM INC.

